Student Feedback from the SPICE Training Class
Universidad Politecnica de Madrid, Spain
March 9 – 11, 2010

On the missing core functionality, a C++ version would be nice, preferably one that takes advantage of "object oriented" programming tools, instead of simply interpreting FORTAN77. Also storing the units of a particular variable with the given variable would be useful, preferably with a call method to extract info on the variables unit. Another student mentioned that the 64-bit architecture for MatLab is desirable.

On the additional kinds of data that should be handled, perhaps a new vector such as SpiceThreeVector which is equivalent to a SpiceDouble array of three elements, with the units of the elements defined in a fourth data element.

On the required readings, maybe it is possible to improve the search for the SPICE-API indexes, with a GUI tool, like Q+A Assistant, with a search function for the index.

A GUI tool for accessing SPICE software and data would be great.

On the code documentation and the hands-on programming lessons, the CSPICE examples need to be written in a clearer manner, the solution code is often hard to follow, specially the flow of data in variables, with are declared at a considerable reading distance from where they are used, in most cases and rarely have names that are easily recognizable and unique meaning. Another student suggested to have easier hands-on lessons to encourage people to do the others.

In the introduction to the NAIF server, it would be useful to have a step by step introduction for the generic (mission independent kernels), as URLs were not displayed.

Tutorials are really helpful once you know how to use them, and very well prepared!

It would be nice to have had an exam or test at the end of the class, to "measure" how much the students have learnt.

On international cooperation, keep working with ESA, as it is good to exchange experiences

Additional comments:

It would be very good if the Digital Shape Model is available as soon as possible, in order to prepare a campaign on the "night" side of 67P/CG with Rosetta (Jorge's N.B. night side cannot be visited with the s/c due to operational constraints).

Additional target model is suggested: generic region, sensing and placement, similar to occultation, but looking at when, how and where the target moves through the target region or between regions. Regions should be user defined relative to a specified reference frame. The actual interpretation - location, size and shape, of what the region means in terms of science is entirely down to the end user, possible primary links would be to trajectory, position, shape and orientation data. This could be easier than doing gravity and magnetic field and atmospheres....

and final comment: you guys are really friendly!!!